

11. "Evidence Supporting Lateral Migration of Oil, San Joaquin Valley, California," GLENN C. FERGUSON, consulting paleontologist, Bakersfield.

Considerable evidence has been presented from time to time in various geologic publications favoring the accumulation of oil derived from "local rich accumulations of organic matter deposited in restricted areas near to, indigenous to, or in contact with the reservoir and trap." Opposed to this view, other authors have favored substantial migration, either lateral or vertical, or both.

Evidence is presented strongly supporting, if not conclusively proving that oil, when provided the proper avenue for underground movement, does migrate laterally over distances of several miles. Nothing is implied to indicate that oil may not have accumulated locally, having been derived from restricted areas, underground stratigraphic, and structural conditions being the governing factors at all times.

12. "Accumulation of Oil in Continental Sediments at the South Belridge Oil Field, Kern County, California," E. J. COENEN and H. D. HOBSON, General Petroleum Corporation, Bakersfield.

Factual data are presented concerning the accumulation of oil in continental sediments at the South Belridge oil field. Included are the structure and stratigraphy of the field, the reservoir characteristics of the sediment and the properties and distribution of the oil and associated waters. The lithology, organic content, and included fluids of adjacent marine sediments are discussed with the objective of making tentative suggestions as to the origin, migration, and accumulation of the oil.

13. "Petroleum on the Continental Shelves," WALLACE PRATT, American Association of Petroleum Geologists Distinguished Lecturer, Frijole, Culberson County, Texas.

President Truman's executive proclamation of September 25, 1945, declaring the continental shelf contiguous to our coasts to be subject to our jurisdiction and control, fell upon the ears of a petroleum industry which in its worldwide search for new sources of supply, had already found its exploratory operations on more than one continent brought to a stop at the land's edge across which it had for years peered uncertainly out to sea. The problem of petroleum resources on the continental shelf challenges first the geologist, then the engineer. The geologist's immediate and pressing responsibility is to review his accumulated knowledge of the character of the continental shelf, and in the light of his concepts of the origin and occurrence of petroleum, to measure the adequacy of the reward which awaits the conquest of petroleum under the submerged margins of the continents to compensate the risk, effort, and expense which this task poses for the engineer. In reply to this challenge to geologists, it is submitted that if the earth is viewed as a functioning organism, surely one of its normal functions since life covered its surface has been the generation of petroleum, much greater volumes of petroleum than are now believed to exist beneath the land areas of the earth should have been formed through the ages. The most likely place to search for these possible additional stores of petroleum is the continental shelf.

14. "Geology of Basement Complex, Edison Oil Field, Kern County, California," J. H. BEACH, Independent Exploration Company, Bakersfield, and HARRY CAMPBELL, Jergins Oil Company, Bakersfield.

The pre-Tertiary metamorphics in the Edison oil field have, since the discovery of this zone by H. H. Magee in June, 1945, yielded 3,330,000 barrels of oil to August 31, 1946. Of the one hundred and three wells which have since been drilled into the basement during its development, all but six have been completed as commercial producers.

Oil has accumulated within the metamorphics in approximately the same area that contains oil in the overlying sediments. The oil produced from the basement is similar to that of the oil produced from the sands, although gravities vary greatly.

Wells with highest initial potentials and highest productivity indices are those completed in the hard, fresh fractured rocks on locally developed structural highs on the Edison uplift.

15. "Santiago Pool, Kern County, California," GLENN W. LEDINGHAM, Western Gulf Oil Company, Bakersfield.

The Santiago pool is located in Secs. 21 and 22, T. 11 N., R. 23 W., in the south San Joaquin Valley. The initial completion was on August 1, 1945, and since that time 26 producers and 4 dry holes have been drilled.

Production was established from an upper Miocene sand roughly equivalent in age to the basal part of the Stevens sand. The average dip is 70°. The developed portion of the pool is 1½ miles long with a maximum width of 500 feet. The north, south, and west limits have been established and development is continuing easterly.

16. "Ramona Field, Los Angeles and Ventura Counties, California," LOYAL E. NELSON, consulting geologist, Los Angeles.

The Ramona field is located 45 miles northwest of Los Angeles near Castaic Junction in the Santa Clara River Basin, Sec. 18, T. 4 N., R. 17 W., and Sec. 13, T. 4 N., R. 18 W.